PREDICTOR OF BREAST SELF- EXAMINATION AMONG FEMALE TEACHERS IN KAFA ZONE, SOUTH WEST ETHIOPIA THE HEALTH BELIEF MODEL APPROACH

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PREDICTOR OF BREAST SELF-EXAMINATION AMONG FEMALE TEACHERS IN KAFA ZONE, SOUTH WEST ETHIOPIA: THE HEALTH BELIEF MODEL APPROACH

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Abstract

Background: *Breast cancer is by far the most frequent cancer of women. It is the second leading cause of death in women worldwide. Approximately one out of eight women develops breast cancer all over the world. More than 90% of cases of cancers of the breast are detected by women themselves, stressing the importance of breast self-examination.*

Objective: *The main objective of this study was to assess factors associated with breast self examination among female teachers in Kafa Zone, South West Ethiopia, 2013.*

Methods: *A cross-sectional study was conducted the study participants were selected by using simple random sampling technique. A self administered questionnaire including socio-demographic characteristics, knowledge about breast cancer and breast self examination structured based on Champion's revised health belief model sub scales used for data collection instrument and analyzed by SPSS soft ware program version 16.0.Multivariable logistic regression analyses was used to identify independent predictors of BSE performance.*

Result: *A total of 315(99.6%) study subjects were participated in this study with mean age of 33 SD [±7] years, 203 [73.02%] of female teachers had poor knowledge of breast cancer and only 52 [18.70%] had heard about breast self examination 38[73.07%] of study participants was perform breast self examination out of performing women's only 11 [28.9 %] reported that they perform breast self examination on regular monthly basis. The respondents main source of information 120 [*43.16%] *TV/radio followed by 24 [8.60 %] health provider and the majority* 124 [44.6%] *of the respondents were had ever obtain information. Women aged ≥40 AOR 1.057 [95% CI 1.004- 1.113], Knowledge about breast cancer AOR 4.062 [95% CI1.536 - 10.738] and Educational level degree and diploma holders AOR 5.443 [95% CI1.470-10.149] were shows significant association. In this study among the CHBM contracts Perceived Susceptibility AOR 1.546 [95% CI* 1.245-1.918], *Perceived severity AOR* 1.142 *[95% CI* 1.028 - 1.26] *and Perceived benefit AOR* 1.239 *[95% CI*1.076 - 1.427*] were significant predictors for breast self examination performance, but perceived barriers, self efficacy and cues to action were not significant.*

Conclusion: *This study tried to assess predictors of breast self examination and it reveals that the Breast self examination performance was alarmingly low. The study evidenced that, age>40 years, high level educational status, having good knowledge, having high perceived susceptibility & perceived severity (perceived threat) high perceived benefit were perform the intended behavior.*

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Acronym / Abbreviation

- ACS: American Cancer Society
- AIDS: Acquire Immune Deficiency Syndrome
- AOR: Adjusted odds Ratio
- BC: Breast Cancer
- BHGI: Breast Health Global Initiative
- CBE: Clinical Breast Examination
- CHBM: Champ Health Belief Model
- COR: Crude odds Ratio
- ERB: Ethical Review Board
- FMoH: Federal Ministry of Health
- HBM: Health Belief Model
- HE: Health education
- HIV: Human Immune Virus
- HP: Health Promotion
- JU: Jimma University
- KZED: Kafa Zone Education Department
- KZHD: Kafa Zone Health Department
- NGO: Non Governmental Organization
- SNNPR: South Nations & Nationality People Region
- WHO: World Health Organization

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Chapter One: Introduction

1.1 Background information

Breast cancer is the most frequently encountered and fatal cancer type in women [1]. It is the 2nd leading cause of death in women worldwide approximately one out of eight women develops breast cancer all over the world [2]. Over the past two decades, breast cancer has become a matter of serious public health concern in developing countries due to a high incidence of this cancer and associated mortality, especially among women [3]. Cancer is an emerging public health problem in Africa. The burden of cancer is increasing because of the aging and growth of the population as well as increased prevalence of risk factors associated with economic transition, including smoking, obesity, physical inactivity and reproductive behaviors [4].

The primary factors that increase risk of breast cancer in women include certain inherited genetic mutations, a personal or family history of breast cancer and biopsy-confirmed hyperplasia. Other factors that increase breast cancer risks include a long menstrual history (menstrual periods that started early and/or ended late in life), obesity after menopause, recent use of oral contraceptives, postmenopausal hormone therapy, never having had children or having the first child after age 30 ethnicity characteristics, exposure to radiation, or consumption of one or more alcoholic beverages per day. Factors that decrease breast cancer risks include breast feeding, moderate or vigorous physical activity and the maintenance of a healthy body weight [5, 6].

The main methods of screening involve mammography, clinical breast examination (CBE), and breast self – examination (BSE). Despite the initiation of modern screening methods, more than 90% of cases of cancers of the breast are detected by women themselves, stressing the importance of breast self-examination [3, 7].

BSE has been reported that women who perform are more breasts aware Women who are more “breast aware” High inspiration to Seeking medical attention. Moreover, unlike the CBEs and mammography that require skilled health professionals, BSE is simple, inexpensive and does not require technology. BSE can be taught to both health

professionals and women, and more importantly raises awareness about BC in women. It is argued that in many countries, especially in low resource countries, BSE may be the only realistic approach to achieve early detection of BC [8].

The purpose of a BSE is to learn the surface features of the breasts; which in turn will allow for one to notice changes in the future in order to detect breast lumps. Breast self – examination, carried out once monthly, between the 7^{th} and 10^{th} day of the menstrual cycle, goes a long way in detecting breast cancer at the early stages of growth when there is low risk of spread, ensuring a better prognosis when treated [9].

It is trouble-free to perform breast self-examination, and it only takes a few minutes. Although it might seem strange or inconvenient at first it is a skill that all women can apply throughout life to help ensure good breast health. There is also evidence that most of the early breast tumors are self-discovered and that the majority of early self-discoveries are by breast self examination (BSE) performers. In developing countries, it is suggested that negative socio-cultural perception of breast cancer, strong beliefs in traditional medicine and perhaps strong religious beliefs are the main reasons for the delay in presentation [10]. The American Cancer Society continues to advise all women over 20 years old to perform regular BSE [11].

BSE was the only realistic approach particularly, in developing countries to early detection of breast cancer, as it is simple, cost effective i.e. does not need a technology and teaching women to practice BSE may raise the awareness about early detection of breast cancer, particularly amongst women living in rural areas [12].

To raise teachers' performance of breast cancer screening, we should identify how they undergo about early detection of breast cancer, as well as the barriers to and the predictors of the practice of BSE and other early-detection methods. Health beliefs play a role in a person's interest in health protective behavior which is potential opportunity to action [13]. While teachers play an effective role in communication and inspiration of young students, assessment of their knowledge and behaviors is essential to reduce the risk of breast cancer among future young generations nevertheless, the practice of screening methods is dependent on the awareness about breast cancer. If this knowledge is poor among those who should teach others, there will be difficulty in promoting these life saving methods [14]

1.2 Statement of the problem

Globally, breast cancer is the most common cancer among women, comprising 23% of the female cancers. It is also the primary cause of cancer-related deaths in low-resource countries [20, 26]. One in eight women born today will be diagnosed with breast cancer at some time in her life [21].

Early diagnosis is the most effective method to reduce morbidity and mortality in breast cancer. Certain methods like clinical breast examination, breast self-examination (BSE) and mammography has been defined as activities facilitating the early diagnosis and improving health and they are accepted as golden standards for early diagnosis of breast cancer [22].

Mammography is the method of choice for the early detection of breast cancer. However its limited use in developing countries due to the high cost and limited availability make BSE a convenient and cost effective method, while less reliable [23].

In the early diagnosis of breast cancer, breast self-examination (BSE) only early detection techniques recommended about 90% of the breast cancer is first noticed by the woman herself. BSE is a sort of examination made by each woman subsequent to the age of 20. BSE is an economical, easy-to-apply, safe, non-invasive procedure with no special material/tool requirements; and it is an effective diagnostic method for breast cancer which only takes five minutes to apply [24].

Women who on a regular basis carry out BSE have a possibility of easily recognizing with both the appearance and feel of their breasts which often helps them detect any changes early. However, if improperly done, BSE has the risk of giving false health security and may actually reduce willingness to undergo screening [25].

communicable and chronic diseases are the major health issues In Ethiopia all the efforts and recourses are allocated into it. Government, non government organizations and international partners all are giving their at most effort to deal with these diseases. Cancer and predominantly breast cancer is on the bottom of their priority list [26].

It is easily understandable that the incidence and mortality of breast cancer is growing at a fast rate. But as we do not have any cancer registry along with relevant data were not well documented it is difficult to say the exact circumstances in Ethiopia.

In most Ethiopia Region and zones access to health care services, especially comprehensive diagnostic services is very low, in some areas completely unavailable hence, individual self health empowerment is very important. Female teachers are not only educators, but serve as role models and change agents who often offer useful counsel on health promotion especially for the students and the community.

Therefore, Studies have not been conducted so far on the predictors of Breast self Examination among female teachers in Ethiopia. Hence, findings from this study will provide a starting point for teachers to raise awareness amongst female students about breast cancer and the role of BSE.

Chapter Two: Literature Review

Study conducted in a rural area in western Turkey Shows that the women's responses 23.4% of them had no knowledge about breast cancer, 27.9% had no concept of BSE, 89.3% had never had a mammography and 75.0% had never had CBE. 27.9% of the women participants expressed no previous knowledge of mammography. Although 72.1% of the participants reported having knowledge of BSE, only 40.9% of the women in the practiced group ever indicated having practiced BSE in the previous 12 months. In this BSE practice group, while 29.5% stated they had examined themselves irregularly, only 10.2% stated that they performed BSE on a regular monthly basis. TV/ radio programs were identified as the main source of information on breast cancer by 39.3% of the participants. Health professionals were mentioned as a source of information by 23.4% of the sample In this study seriousness and susceptibility were not significant in explaining BSE performance but BSE-benefit and reduced BSE-barriers were significantly associated with it [5].

Female secondary school teachers in Ilorin, Nigeria shows that most of the respondents, 95.6% had heard about BSE at one time or the other. The commonest source of information about the topic was the television, 29.7% followed by friends, 28.2%. Sixty-four 19.6% of those who heard about it heard from multiple sources while only 14.6% heard from health personnel. Majority of the respondents, 54.8% of the respondents had done BSE before while 5.2% had never done it. One hundred and sixty 49.0% of the respondents who knew about the procedure were currently doing it while 50.9% were not. 71.8% of the respondents who were doing BSE did it once monthly, 12.5% indicated three monthly, 3.1% twice yearly and 12.5% once a year. 29.9% of those who had done BSE before indicated that their last BSE was the present month, 35.8% the preceding month, and 9.6% three months previously 11.7% six months ago. 15.6% of those who did so examined their breasts during the 41.7% of the respondents knew the correct BSE procedure, 21.7% indicated wrong procedures while 36.5% did not know about the procedure at all [9].

Study in Breast self examination practices among female secondary school teachers in a rural community in Oyo State, Nigeria 54% of the respondent had poor knowledge, 46% of women had insufficient knowledge [10].

Study in exploration of barriers to Breast Self Examination carried out in Malaysia Awareness of breast cancer and knowledge of BSE heard about breast cancer (81.1%) & 90.0% had heard about BSE 77.5% believed that BSE is important for early detection of breast cancer. Amongst respondents 46.4% knew how to perform BSE. The most common source of information for them was printed media 34.7% followed by medical health personnel 28.7% and electronic media such as TV and radio (22.3%). Practice and reasons of doing BSE Almost 55% of respondents have performed BSE before. Among those who practice BSE, only 28.5% of them practice BSE once a month. The majority Logistic regression results of factors associated with BSE Variables that were significantly associated with BSE in bivariate analysis were included in the multiple logistic regressions entered were age, race marital status, level of education, occupation and monthly income. BSE was more likely to be done among women aged ≥45 years in comparison to those aged 18-29 years university level of education compared to those with less than university level [12].

The study carried out about the Health beliefs and Breast Self-Examination in a sample of Turkish women academicians in a university Health belief toward BSE of the participants were found as favorable. Benefit perception of BSE had the highest values and barrier perception had the lowest value among the health beliefs of the academicians related to BSE practice BSE self-efficacy and low perceptions of barriers and perceived susceptibility to breast cancer demonstrate increased levels of BSE performance Single academicians perceived susceptibility ($t=2.40$, $p=0.01$) and seriousness higher than the married ones. Family history of breast cancer of participants affected their health beliefs subscale (perceived susceptibility). It was found that perceived barriers relating to BSE of participants were higher in those who did not have a practice of BSE ($t=3.66$, $p=0.00$). Confidence was significantly higher in those with regular practice of BSE [13].

Study in Kuwaiti female school teach 67.5% of the participants declared that they had information about breast cancer49.9%) of the teachers declared that they do not know how

to practice BSE, 29.0% of them knew the procedure but never applied it, 14.0% applied it when they remembered, the remaining 7.1% of the participants applied the technique either on weekly, monthly or yearly basis. Moreover, 81.9% [14]

The cross sectional study on Breast Cancer: Knowledge and Perceptions of Chinese Women in Hong Kong Source of health information Mass media, such as newspaper and television, is the major information source of breast cancer (73.2%) and BSE (60.3%), followed by doctors or health care providers (16.1% for breast cancer information; 25.9% for BSE information). Only 31.9% of the respondents reported that they did not practice BSE in the past month. The perceived benefit scores were not significantly different among demographic characteristics [15].

Breast Cancer Risk Factors include gender, age. Family history of breast cancer, personal history of breast cancer, racial factor, radiation therapy to the chest, Cellular changes, late menopause, early menarche, Prolonged null parity, overweight, diet, alcohol consumption, tobacco smoking, exposure to oestrogen, oral contraceptive use, stress and anxiety [16].

According to the study in Turkey Socio-demographic Factors and the Practice of Breast Self Examination shows that 75.1% of them had information about breast cancer. They heard information about breast cancer 48.1% in TV/ radio, 43.2% by doctors and nurses. According to the women's responses 40.6% of them had no knowledge about breast self examination, Practicing BSE of women was irregular (40.6%, n=155). Only 27.3% (n= 62) of them had done BSE once a month. Socio-demographic characteristics of women with their health belief model subscale mean scores were examined. In this study susceptibility to breast cancer, seriousness of breast cancer, benefits-BSE, barriers-BSE, were statistically significant in BSE performance. BSE for the young women were perceived more barriers. Young women had higher self-esteem and motivation [17].

Higher education was associated with a more common belief in early diagnosis of BC, and performing regular BSE. The education level also influenced the reasons for irregular BSE, as nearly 50% of the graduate women argued that they were too busy, compared to 24% among the less educated women. The education level of women emerged as a significant

determining factor for BSE performance. University level education increased BSE performance by 1.8 times [18].

Study about Health Beliefs of Nurses about Breast Self Examination The majority (57%) of studied nurses did not believe that they are susceptible to breast cancer and believed that breast cancer is a serious condition. Nevertheless, more than 80% of nurses recognized the benefits of BSE and 54.3% perceived themselves confident in BSE [19].

According the study in Iraq about Knowledge, attitude and practice regarding breast cancer and breast self-examination among a sample of the educated population shows that 48.3% of the participants practiced BSE. 33.1%; not trusting their own examination only 7.4% did not believe in the benefit of BSE [20]. A cross-sectional study conducted in three Local Government Areas in Rivers State, Nigeria 39.65% of respondents has heard of BSE out of these only 28.94% practice it. It has been previously documented that women who are better educated are more knowledgeable of and more likely to practice BSE [23].

The Health Belief Model Descriptive information form was developed by the researchers. It was about women's socio-demographic characteristics Descriptive information form will be developed by the researchers. It was about women's socio-demographic characteristics (Age, Marital status, History of breast problems, Education status, Frequency of doing BSE practice, Source of information about BSE.

The Health Belief Model (HBM) emphasizes cognitive and attitudinal influences, and is the most widely used model to predict BSE behavior. This model posits that six factors relate to the performance of a surveillance behavior: perceived severity of the disease (also referred to as perceived seriousness), perceived susceptibility to contracting the disease, perceived benefits of engaging in the screening behavior, perceived barriers to engaging in the screening behavior, self-efficacy to maximize its utility. According to the HBM, women who perceive themselves as susceptible to breast cancer and believe the disease is serious are more likely to be motivated to take action against the health threat. Also, women who believe that performing BSE has more benefits than barriers are more likely to take part in regularly practicing BSE. This model also proposes that increased self-efficacy concerning

the behavior and exposure to more cues regarding the behavior will increase the likelihood that the behavior will be practiced regularly [28].

The Champion instrument measures the HBM concepts of susceptibility, seriousness, benefits, barriers, and self-efficacy as they relate to breast cancer screening. The original scales were tested and found to be valid and reliable for measurement of BSE practices and breast cancer beliefs. The latest version of the scale was adapted for Iranian use in this study. The questionnaire consisted of 31 items. All items have five response choices ranging from "strongly disagree (scores 1 point)" to "strongly agree (scores 5 points)". Higher scores indicated a positive attitude towards health care except for barriers to BSE. Susceptibility of breast cancer consisted of 3 items ranging from 3 to 15 scores, seriousness of breast cancer consisted of 6 items ranging from 6 to 30 scores, BSE benefits consisted of 4 items ranging from 4 to 20 scores, BSE barriers consisted of 8 items ranging from 8 to 40 scores and BSE self-efficacy consisted of 10 items ranging from 10 to 50 scores. CHBMS was translated from the source language to the target language and then back-translate them to the source language. The reliability coefficient for each subscale was calculated using Cronbach`s alpha technique. Cronbach`s alpha coefficients of the original CHBMS for susceptibility, seriousness, BSE benefits, BSE barriers and BSE self-efficacy were 0.87, 0.80, 0.69, 0.83 and 0.90 respectively and Cronbach`s alpha coefficients of CHBMS calculated for this study for susceptibility, seriousness, BSE benefits, BSE barriers and BSE self-efficacy were 0.68, 0.77, 0.78, 0.77 and 0.87 respectively [29].

Study conducted in Iranian women Factors Influencing Breast Cancer Screening Behavior. The women with college education were more likely to perform BSE In the logistic regression analysis two CHBMS variables had significant odds ratios. The results revealed that the women with greater perceived self-efficacy were one time more likely to perform BSE than those with lower perceived self-efficacy. The women who perceived greater barriers to BSE were somewhat less likely to perform BSE. The other components of CHBMS were not significant predictors for BSE performance [39].

Significance of the study

Breast cancer is the most frequent female malignancy world-wide with more than a million cases reported annually. There is a marked geographical variation in incidence rates of breast cancer, being highest in the developed world and lowest in the developing countries of the third world. However, in recent years, the incidence of breast cancer has shown an alarming increasing trend in developing countries it is estimated that 45% of the 1.35 million new cases diagnosed each year, and more than 55% of breast cancer related deaths, occur in low and middle income countries [26].

Even there is no well documented information about breast cancer in Ethiopia, the problem is high and currently it becomes a public health concern. Early detection and management of breast cancer reduce the mortality attributed to the disease. In developing countries mammography screening program for early detection of breast cancer is unavailable due to limited resources, BSE become palatable option increasing breast health awareness. But in Ethiopia breast self examination is not well known and females are not widely practicing it due to various reason. So lack of knowledge about barriers and facilitating factors of breast self examination is considered as one and main obstacle to increase awareness and practice in Ethiopia addition to limited studies about the problem. Teachers constitute one group of professionals who have regular contact not only with their students in schools but with the community members who look at them as change agents and role models.

Therefore the aim of current study examines the knowledge and constructs arising from the Health Belief Model as predictors of breast self examination behavior among female teachers. The finding from this study will help for health department at different level, Health policy makers and planners as evidence based information to improve breast self examination practice. It also serves as input for further studies.

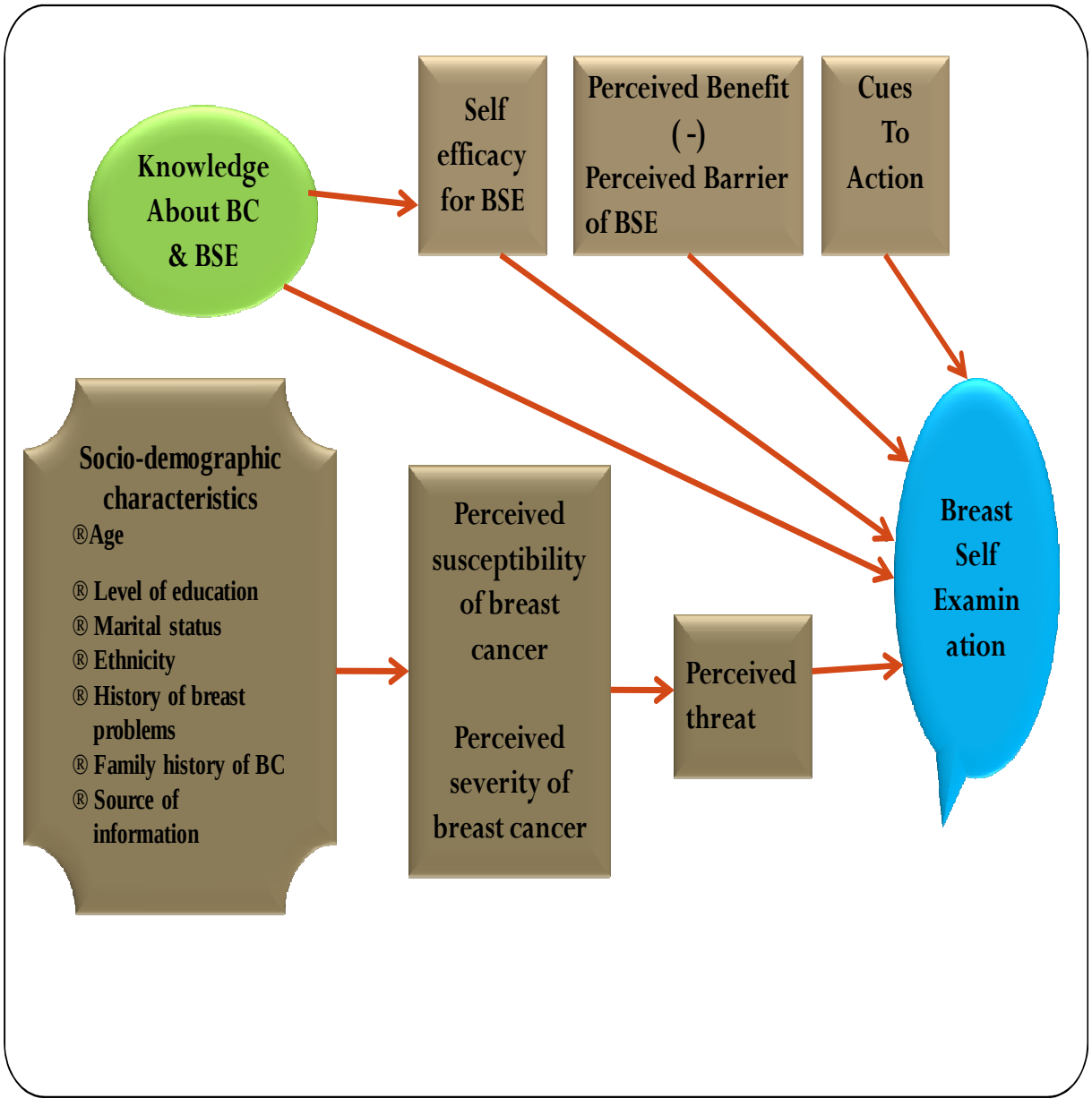

Figure 1 Adapted Conceptual frame work on breast self- examination

Chapter Three: Objective

3.1 **General objective**

To assess predictors of breast self examination (BSE) among female teachers in Kafa Zone, South West Ethiopia, 2013.

3.2 **Specific objectives**

1. To determine the level of knowledge towards breast self examination.
2. To identify performance of BSE using HBM sub scales.

Chapter Four Methods and Materials

4.1 Study area

The study was conducted in Kafa Zone. It is one of 14 zones in SNNPR located 458 Km south west of Addis Ababa & 788 Km to west of regional city (Hwassa). Kafa zone is administratively divided in to 10 woreds, 312 kebeles (296 rural and 16 urban) with total population of 1.1million (50.8% female & 49.2% male) for 2011/12 which is projected from 2007 CSA. About 91% of population live in rural and 93% of population belongs to kafa ethnic group. The zone has one hospital 36 health centers, 264 health posts and 32 private clinics with potential health service coverage of 94% education for The academic year 2012/13 teaching learning activity employed by using 435 First & second cycle, 17 secondary, 3 preparatory school 1 TVT and 1 teachers training Collage functional within these schools 3209 male and 1175 female total 4384 teachers were available kafa is a place where the coffee origin.

4.2 Study period

The study was conducted from March 1 to March 30, 2013.

4.3 Study design

Cross sectional study design was employed.

4.4 Populations

4.4.1 Source population

All female teachers in the academic year of 2012/13 in kafa zone

4.4.2 Study population

All selected female teachers in the academic year of 2012 /13

4.5 Inclusion and exclusion criteria

4.5.1 Inclusion criteria

- Female teachers available during data collection.

4.5.2 Exclusion criteria

- Age <20 female teachers

4.6 Sampling technique and procedure

4.6.1 Sample size determination

The sample size was determined using single population proportion statistical formula at 95% of confidence interval with assumption of prevalence of Breast self examination practice were 54.8% [9] with 5% precision and 10% was added for possible non-response the final sample size was 316.

4.6.2 Sampling technique

Total Sample was allocated to all woreda found in the zone proportionately based on number of female teachers in each woreda, and then the study participants was selected using SRS.

$$n = \frac{(\frac{z\alpha}{2})^2 \times p\,(1-p)}{d^2}$$ n= the minimum sample size

Since the source population <10, 000, the population correction formula was employed.

The sample size is calculated by using the statistical formula

Where

n= the minimum sample size

$\frac{z\alpha}{2}$ =1.96 (95% confidence level for two side)

p= 54.8% prevalence of BSE

d= margin of error (5%)

Therefore the value of n was calculated as follows

n= $\frac{(1.96)^2 x 0.548(1-0.548)}{(0.05)^2}$ n= 384

By using population correction formula

N =1175

$$n' = \frac{n}{1 + \frac{n}{N}}$$ **n=287**

10`% possible non respondent will be added, the final sample size will be 316

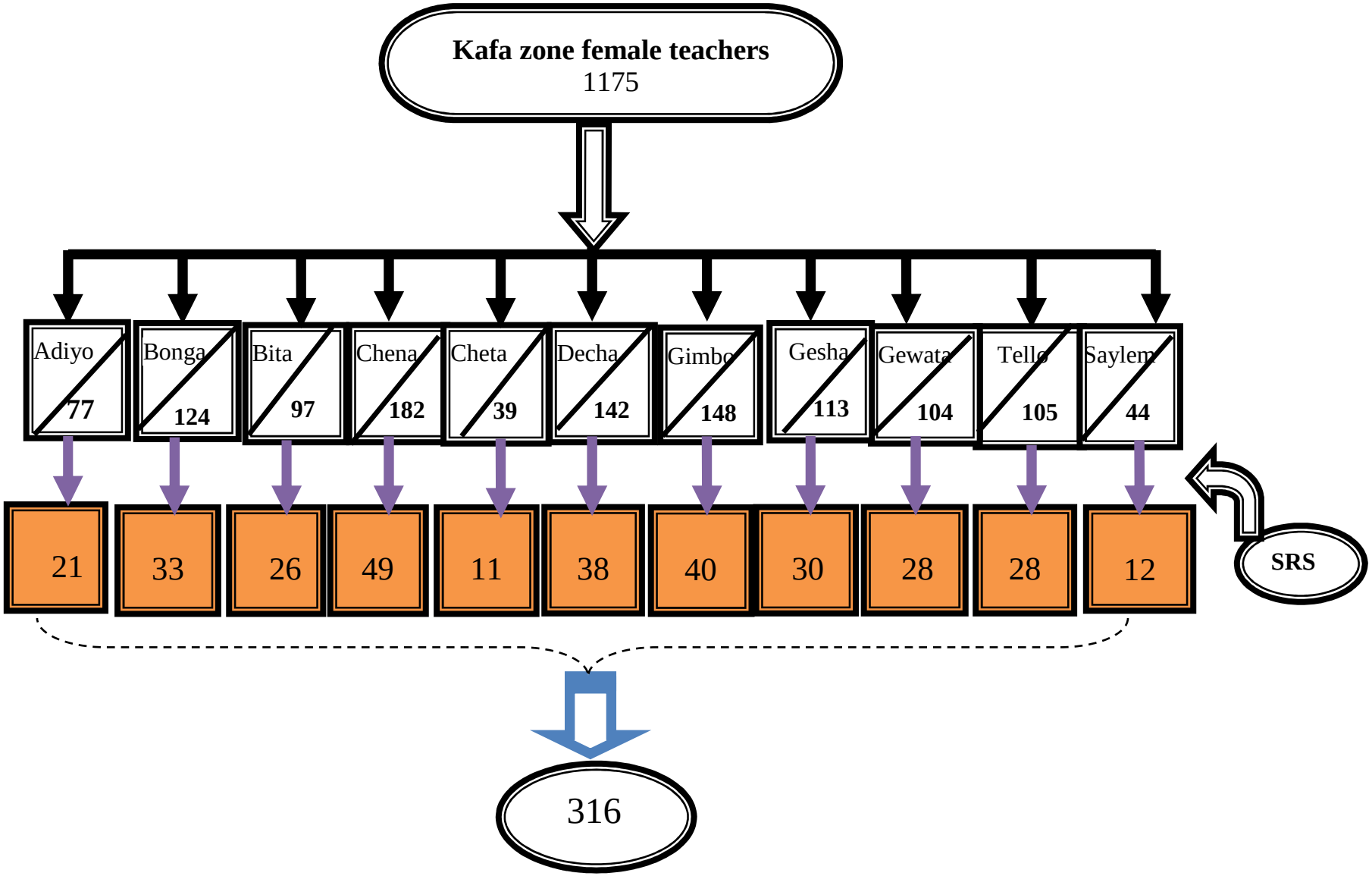

Figure 2 schematic presentation of sampling procedure

4.7 **Variables**

4.7.1 Dependent variable:

Breast self examination (BSE)

4.7.2 Independent variables

Socio demographic characters

- ✓ Age
- ✓ Marital status
- ✓ History of breast disease
- ✓ Educational level
- ✓ Family history of breast cancer
- ✓ Source of Information about breast cancer and BSE

- ➢ Knowledge
- ➢ Perceived susceptibility
- ➢ Perceived severity
- ➢ Perceived benefit
- ➢ Perceived barrier
- ➢ Self efficacy
- ➢ Cues to action

4.8 Data collection Procedure

A self administered questionnaire capturing socio-demographic characteristics, Knowledge and the standard questioners adopted from 1993 Champion's revised Health Belief Model Scale (CHBMS) was used as data collection instruments for this study. The questionnaire consisted of 31 items. All items offered five response choices ranging from "strongly disagree (scores 1 point)" to "strongly agree (scores 5 points)" Higher scores indicated a positive attitude towards BSE except for barriers to BSE. Susceptibility of breast cancer consisted of three items scored from 3 to 15, seriousness of breast cancer consisted of six items scored from 6 to 30, BSE benefits consisted of four items scored from 4 to 20, BSE barriers consisted of eight items scored from 8 to 40 and BSE self-efficacy consisted of 10 items scored from 10 to 50.

The reliability coefficient for each subscale was calculated using Cronbach alpha. Cronbach`s alpha coefficients for the original CHBMS were Susceptibility to breast cancer: 0.87, Seriousness of breast cancer: 0.80, Benefits-BSE: 0.69 Barriers-BSE: 0.83, Self efficacy To perform BSE 0.90 (29).

Cronbach's alpha coefficients for the current study were Susceptibility to breast cancer: 0.81, Seriousness of breast cancer: 0.77, Benefits-BSE: 0.83, Barriers-BSE: 0.86, Self efficacy to perform BSE 0.84

4.9 Data processing and Analysis procedures

Data was checked for completeness and consistency. It was coded and entered to computer using Epi data version 3.1 exported for analysis and analyzed by SPSS program version 16.0. Summery result was presented using Frequency table, Cross tabulation, Descriptive and Bivariate analysis was done to determine association between factors and breast self examination. Variables with p value < 0.25 were considered as a candidate to be entered to multivariable logistic regression and P value less than 0.05 was considered as statistical significant.

4.10 Data quality assurance

Eleven coordinators and 3 supervisors who have degree holder female teachers were trained for two days on the objective of the study, method of data collection & context of questionnaire. Data was checked for completeness, accuracy, and consistency by supervisors & principal Investigator after the data collection on daily base. Double entry was performed to assure quality of data. Prior to data collection, the questioner was translated to Amharic using a backward-forward translation technique. To do this, one language teacher and one health officer translated the items from English to Amharic and then it was back-translated into English by another English teacher. Minor translation adjustments were carried out until the two versions (Amharic/English formats) were identical. Pre-tested was conducted on 5% of female teachers those who were not be included in the study to identify the clarity & sequence of question

4.11 Operational definition

- **Knowledge**: defined in this study, from total knowledge related question, if the participant responds: less than 60% correctly categorized as having poor knowledge, 60-75% correctly categorized as having faire knowledge and Greater than 75% having Good knowledge.
- **Perceived susceptibility**: The responses of perceived susceptibility questions were summed and higher sum score indicates higher perceived susceptibility.
- **Perceived severity**: The responses of perceived severity questions were summed and higher sum score indicates higher perceived severity.
- **Perceived benefit**: The responses of perceived benefit question were summed and higher sum score indicates higher perceived benefit.
- **Perceived barrier**: The responses of perceived barrier questions were summed and higher sum score indicates higher perceived barrier.
- **Self efficacy**: The responses of self efficacy questions were summed and higher sum score indicates higher perceived self efficacy.

4.12 Ethical Consideration

Ethical approval and clearance was obtained from the Jimma University Ethical Review Board (ERB). Letter of cooperation to each woreda was obtained from Kafa Zone Education Department (KZED). Informed consent was obtained from the study participants prior to data collection.

4.13 Dissemination plan

The finding of the study will be presented to the college of public health and medical sciences of Jimma University. And copy of the result will be submitted to Kafa Zone Education and Health Departments, also for other concerned body. Subsequently, attempts will be made to present on scientific conferences seminars, meetings, workshops and publish it on scientific journals.

Chapter five: Results

5.1 Socio - Demographic Characteristics of the Study Participants.

A total of 315 study subjects participated in this study making response rate of 99.6%. The mean age of the study population was 33 (±7) years. The minimum age was 20 and the maximum was 55 years old. Concerning marital status 80% (n=252) of the participant were marred. Majority 52.7% (n=166) were diploma followed by 35.9% (n=113) certificate and 11.4% (n=36) had first degree in educational status, 80.5% (n= 254) were Kafa by ethnic and 82.5% (n=260) were Orthodox by religion and 86.3% (n=272) of the respondents indicated that they did not have any previous history of breast disease. From the total study participants 2.9% (n=9) were reported that they had had family history of breast cancer. (Table 1)

Table 1: Socio-Demographic characteristics of the study participant in kafa zone female teachers south west Ethiopia March, 2013 n=315

Category	Frequency	%
Age		
20-29	111	35.3
30-39	145	46.0
40+	59	18.7
Marital status		
Single	37	11.7
Married	252	80.0
Divorced	26	8.3
Education		
Certificate	113	35.9
Diploma	166	52.7
Degree	36	11.4
Ethnicity		
Kafa	254	80.5
Amhara	38	12.1
Oromo	14	4.4
*Other	9	2.9
Monthly income		
1st Quartile	82	26.0
2nd Quartile	76	24.1
3rd Quartile	80	25.4
4th Quartile	77	24.4
Religion of the respondent		
Orthodox	260	82.5
Catholic	25	7.9
Muslim	23	7.3
Protestant	7	2.2
Family history of breast cancer		
Yes	9	2.9
No	306	97.1
History of breast disease		
Yes	43	13.7
No	272	86.3

* *Others Dawro, Gurage, Tigray and Bench*

2.2 Knowledge and source of Information towards Breast Self-Examination

Majority of study participants n=278 (88.3%) have heard about breast cancer and n=52 (18.70%) of the participants have heard about BSE. Out of though who have heard about BSE n=47 (90.38%) have mentioned that breast self examination was necessary, were as n=27 (51.92%) were know BSE start at age 20 years 19 (36.53%) reported that they know time to report physician after getting any symptom of breast cancer. According to the women's responses n=203 (73.02 %) of them had no knowledge about breast self examination. The response towards predisposing factors and symptoms of breast cancer were n=60 (21.58%) and 87(31.29%) respectively. All participants expressed had never had mammography and Clinical Breast Examination (CBE).

Information towards BC/BSE Majority n=120 (43.16%) of the respondents mentioned television/radio as main sours of information while n=24 (8.63 %) get the information from health professionals, about n=17 (6.11%) heard from multiple source and n=10 (2.78 %) friends were the least source but highest proportion n=124 (44.6%) of the respondents were never obtain information about BC/BSE. (Table2).

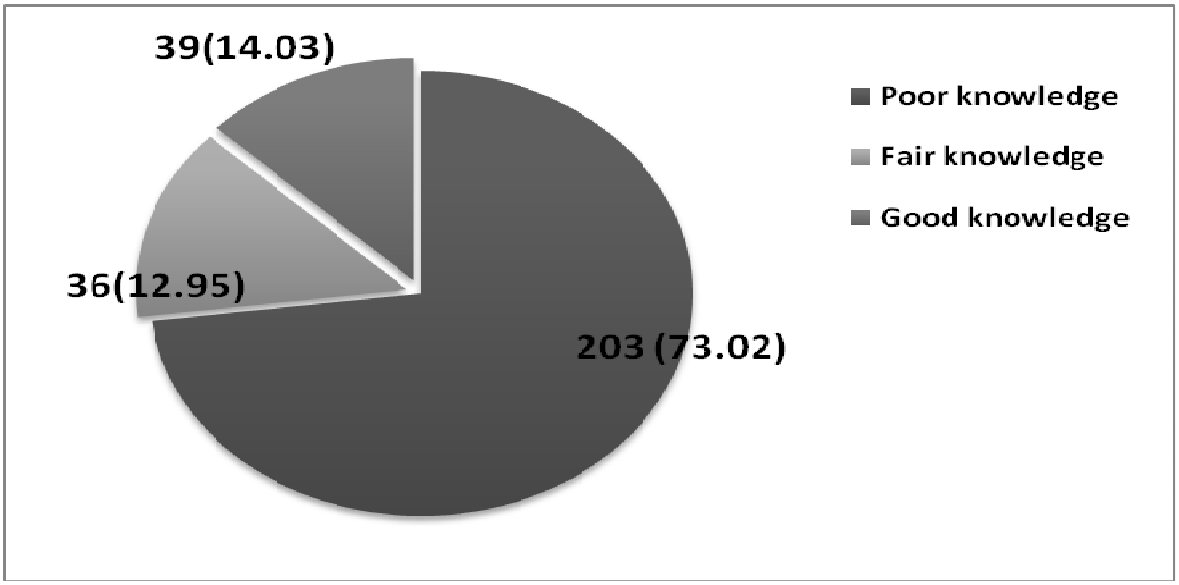

Figure 3 Respondent's knowledge of BC Kafa Zone female teachers south west Ethiopia March, 2013

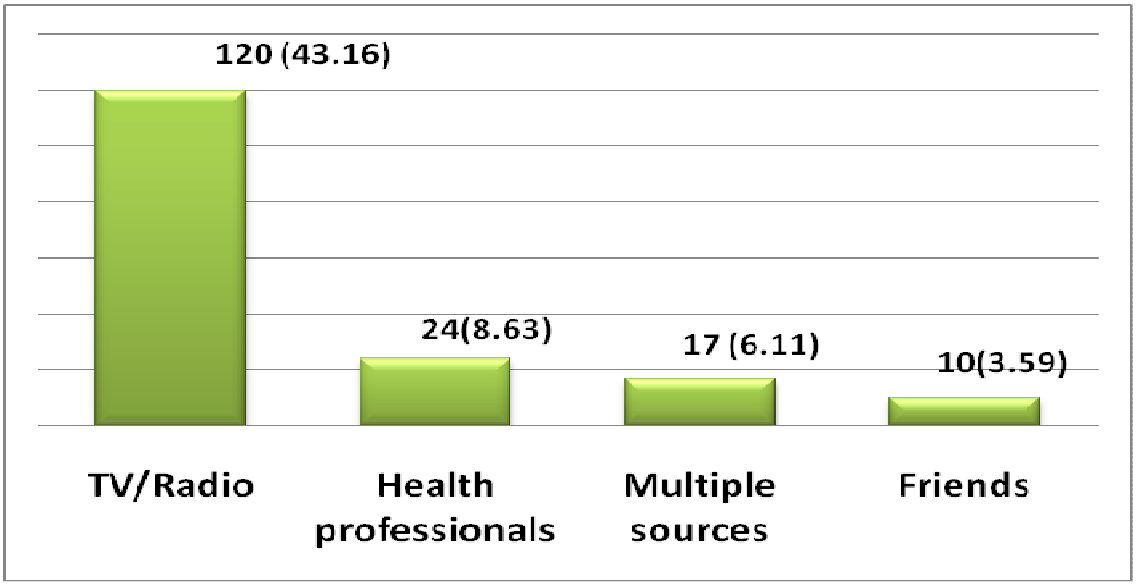

Figure 4 Respondents Source of information towards BC and BSE in Kafa Zone, South West Ethiopia March 2013

5.3 Breast Self-Examination (BSE) practices of respondents

In the present study n=52 (18.7%) of women were heard about BSE while n=38 (73.07%) examined themselves and out of this n=11 (28.9 %) practice BSE on monthly basis (regular) and n=27 (71.1%) performed BSE irregular base. Table 2

Table 2 Breast Self-Examination (BSE) performances among those heard about BSE Kafa Zone female teachers south west Ethiopia March, 2013 n=52

Characteristics	Category	Frequency	%
Performing BSE	Yes	38	73.08
	No	14	26.92
Frequency of BSE (overall)	Once a week	15	39.50
	Once a month	11	28.90
	Once three month	8	21.10
	Once a year	4	10.50
Frequency of BSE (among those perform BSE)	Regular	11	28.90
	Irregular	27	71.10

5.4 Socio Demographic factors associated with Breast Self Examination

Among the Socio demographic variables Age, Educational status, Personal history of breast disease, and Knowledge about breast cancer & BSE were significantly associated ($p< 0.05$) with the performance of Breast Self Examination marital status, monthly income and family history of breast cancer not associated with performance of breast self examination in bivariate analysis. History of Breast disease was statistically significant with breast self examination performance those having history of Breast disease about 3 times more likely to perform BSE compared to not having history of Breast disease COR 2.641 (95% CI1.177, 5.926) Table4

Table 3 Socio Demographic Factors Associated with Breast Self-Examination performance in Kafa zone female teachers south west Ethiopia March, 2013

	Breast self examination			
Variables	Yes freq (%)	No freq (%)	COR(95%CI)	P
Marital status				
Single	5(13.2)	31(11.2)	1	
Married	28(73.7)	225(81.2)	0.796(.29, 2.21)	0.662
Divorced	5(13.2)	21 (7.6)	1.52(0.39,5.92)	0.543
Educational status				
Certificate	6(15.8)	107(38.6)	1	
Diploma	24(63.2)	142(51.3)	**3.014 (1.190, 7.632)**	0.020
Degree	8(21.1)	28(10.1)	**5.095 (1.634, 15.889)**	0.005
History of Breast disease				
Yes	10(26.3)	33(11.9)	**2.641 (1.177, 5.926)**	0.019
No	28(73.7)	244(88.1)	**1**	
Knowledge				
Poor Knowledge	17(44.7)	212(76.5)	1	
Fair Knowledge	8(21.1)	33(11.9)	**3.023(1.209, 7.562)**	0.018
Good Knowledge	13(34.2)	32(11.6)	**5.066(2.249, 11.413)**	0.001
Age ****			**1.051(1.006, 1.097)**	0.024

**** *continues variable*

5.5 Association between CHBM subscales and BSE performance in bivaraite analysis

Among the construct of health belief model subscales only cues to action was not associated with breast self examination performance in bivariate analysis COR 0.554 (95% CI 0.222, 1.382). **Table 5**

Table 4 Association between CHBM subscales and BSE performance in bivaraite analysis Kafa zone female teachers south west Ethiopia March, 2013

Variables	**B**	**S.E.**	**Wald**	**COR(95% C.I)**	**p-value**
Susceptibility	0.459	0.096	22.907	**1.58 (1.311, 1.909)**	0.001
Severity	0.112	0.046	6.008	**1.119 (1.023, 1.224)**	0.014
Benefit	0.244	0.061	15.797	**1.276 (1.132, 1.439)**	0.001
Barrier	-0.086	0.573	1.128	**0.918 (0.856, 0.985)**	0.017
Self efficacy	0.065	0.018	13.296	**1.070 (1.032, 1.109)**	0.001
Cues to action					
Have cues				0.554 (0.222, 1.382)	0.206
No cues				1	

1.6 **Independent predictors of BSE**

In order to control confounding factors a multivariate analysis was used. Those P-values less than 0.25 in bivariate analysis were included in multivariate analysis. Among socio demographic variables: age, level of education and Knowledge about BC & BSE were significant in explaining BSE performance furthermore among constrict of health belief model scales Perceived susceptibility, Perceived severity and Perceived benefit were independent predictors of BSE.

Age of the participant was remaining its association with BSE after controlling possible confounding as participant age increase by one year the odds of performing breast self

examination was increase by 1.057 times keeping all other factors constant. AOR 1.057 (95% CI 1.004, 1.113)

Educational status of the teachers was significantly associated with BSE 5.4 times degree and 3.4 times diploma holders were more likely perform BSE compared to certificate holders AOR 5.4 (95% CI 1.47, 10.15) and AOR 3.4 (95% CI 1.204, 9.827) respectively.

More performance of BSE were observed from those who have good Knowledge about breast cancer & BSE compared to those having poor Knowledge AOR, 4.062 (95% CI 1.536, 10.738).

After controlling possible confounding Perceived Susceptibility was associated with performance of BSE, our study showed that a unit increase in total score of perceived susceptibility the likely hood of performing breast self examination was increased by 1.546 times keeping all other variables constant. AOR 1.546 (95% CI 1.245, 1.918)

Similarly after holding other factors a unit increases in a total score of perceived severity performance of breast self examination was increases by 1.142 times. AOR 1.142 (95% CI 1.028, 1.269)

Perceived benefit of breast self examination was significantly associated with BSE. By controlling the effect of all other relevant factors the result indicated that per a unit increase in sum score of perceived benefit performance of breast self examination was increases by 1.239 times. AOR 1.239 (95% CI 1.076, 1.427)

Multivariable logistic regression model to identify independent predictors of BSE among Kafa Zone female teachers south west Ethiopia march, 2013

Variables	COR(95% CI)	AOR(95% CI)	P
Educational status			
Certificate	**1**	**1**	**1**
Diploma	**3.014 (1.190, 7.632)**	**3.439(1.204, 9.827)**	**0.021**
Degree	**5.095 (1.634, 10.889)**	**5.443(1.470, 10.149)**	**0.011**
Knowledge			
Poorly knowledgeable	**1**	**1**	**1**
Fairly knowledgeable	**3.023(1.209, 7.562)**	**1.911(0.641, 5.695)**	**0.245**
Knowledgeable	**5.066(2.249, 11.413)**	**4.062(1.536, 10.738)**	**0.005**
Susceptibility****	**1.58 (1.311, 1.909)**	**1.546(1.245, 1.918)**	**0.001**
Severity****	**1.119 (1.023, 1.224)**	**1.142(1.028, 1.269)**	**0.013**
Benefit****	**1.276 (1.132, 1.439)**	**1.239(1.076, 1.427)**	**0.003**
Barrier	0.918 (0.856, 0.985)	0.941(0.871,1.017)	0.123
Self efficacy	1.070 (1.032, 1.109)	1.039(0.991,1.089)	0.117
Cues to action			
Have cues	1	1	1
No cues	0.554 (0.222, 1.382)	.801(.316,2.031)	0.640
Age****	**1.051(1.006, 1.097)**	**1.057(1.004, 1.113)**	**0.033**

**** continues variable

Chapter six: Discussion

BSE is a simple, cost-free, and easily applicable method. It is remarkably effective in increasing self-responsibility about health, encouraging adoption of preventive health behaviors, and creating awareness about BC among women. It is argued that in many countries, especially in low resource countries, BSE may be the only realistic approach to achieve early detection of BC

An alarming finding was that very few teachers perform Breast self-examination among sampled school female teachers 38(12%) This is inconsistent with study conducted in female secondary school teachers in Ilorin, Nigeria and rural community in Oyo State, (9, 10). This might be due to lack of community base awareness and screening program of breast self examination in our country.

Age of the participant was association with BSE after controlling possible confounding. As participant age increase by one year the odds of performing breast self examination was increase by 1.057 times keeping all other factors constant. This was in line with studies conducted in Shah Alam, Malaysia, and A Cross-Sectional Study in Turkey (12, 18). These might be older women are considered to be at a higher risk for BC and, being at higher risk of BC may create a self-awareness that contributes to the preventive measures undertaken by these. Other possible reason might be women that aged were more exposed to health care facilities during pregnancy, delivery and follow up.

In our study, educational level of teachers emerged as a significant determining factor for performance of breast self examination. Participants those having degree and diploma were 5.4 and 3.4 times more likely perform BSE compared with those having certificate AOR 5.4 (95% CI 1.470, 10.149), AOR 3.4 (95% CI 1.204, 9.827) respectively. This finding was inconsistent with a Cross-Sectional Study in Turkey showed that there were no association between education level of women and breast self examination performance (18). While the finding was in line with the study conducted in Kuwait academicians and in Rivers State, Nigeria and Iran (14, 23, 39). These might be due to knowledge difference of the study population and/or more educated women have access to electronic and print media utilization.

In this study the female school teachers those having good knowledge of BC & BSE were 4 times more likely perform BSE compared to those having poor Knowledge AOR, 4.062(95% CI 1.536, 10.738). This finding was consistent with study conducted in Turkish Academic women and housewives also other similar study among female secondary school teachers in Ilorin, Nigeria (8,9). This may be explained by the fact the knowledge of breast cancer and BSE was recognized as a necessary precursor to women's adherence performance of BSE.

In our study perceived susceptibility, perceived severity of Breast cancer and Benefit towards BSE were significant in explaining BSE performance, but perceived barriers and perceived self efficacy of BSE were not significant.

Perceived susceptibility of breast cancer has shown statistically significant association with BSE performance our study showed that as increase in total score of perceived susceptibility the likely hood of performing breast self examination was also increased. This finding is consistent with different studies conducted in Turkey (13, 17). This might be the study participants those having high susceptibility may belief that early detection has the potential to improve cancer outcomes.

Similarly as increase in total score of perceived severity the odds of breast self examination performance was increase. This finding was in line with studies conducted in Nigeria and Kuwaiti (5, 14).This might be due to the individual beliefs about the seriousness of the disease and possible outcome of the disease.

Also having high perceived susceptibility and perceived severity increases the threat of respondents, so those participants perform the likely behavior. Teachers who perceives high susceptible to breast cancer and that breast cancer is a serious disease increases their threat would be more likely to perform breast examinations.

Among the constructs perceived benefit was significantly associated with BSE this result indicated that as increase in sum score of perceived benefit the odds of breast self examination performance also increases. Similar finding was reported from cross-sectional

study conducted in Kuwaiti female school teachers and Turkish Women (14, 17). This might be due to teachers were open to adopt health behaviors despite early diagnosis, to reduce risk of getting breast cancer with the developed behaviors.

Strength and Limitation of the study

Strength of this study

1. High response rate 99.6%.

Limitation

1. Generalization for total population was difficult, since the study was conducted on specific group.
2. Since the participants were asked to respond their past practice and experience, this might be subject for recall bias

Chapter Seven: Conclusion and recommendations

7.1 Conclusion

This study tried to assess predictors of breast self examination and it reveals that the Breast self examination performance and knowledge about breast cancer was alarmingly low.

The study evidenced that, participant age, high level educational status, having good knowledge, having high perceived susceptibility, perceived severity (perceived threat) high perceived benefit were explained BSE performance.

7.2 Recommendations

1. MoH and health sector at different level should develop strategies that increase the awareness and knowledge about breast cancer.
2. MOH should give consideration to establish community based BSE program.
3. Health professionals and health extension workers should promote breast health education program at school and community level.
4. Further research is recommended on women in rural and urban areas, including their cultural and norms regarding BSE

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Annexes

JIMMA UNIVERSITY

COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES

DEPARTMENT OF HEALTH EDUCATION AND BEHAVIORAL SCIENCES

Questionnaire prepared to identify the factors associated with the practice of Breast Self Examination (BSE) among female teachers in, Kafa Zone, South West Ethiopia, 2012

Site: Kafa Zone

Dear participant

I am ……. student of post graduate master of public health in health promotion and health education. Ending this I am conducting my research thesis to identify the factors associated with the practice of Breast Self Examination (BSE) among female teachers of, Kafa Zone, South West Ethiopia

Confidentiality and consent: "I'm going to ask you some very personal questions that some people find difficult to answer. Your answers are completely confidential. Your name will not be written on this form, and will never be used in connection with any of the information you tell me. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to. However, your honest answers to these questions will help us for planning and prominent policy making regarding the problem and so your responses are vital for achieving the goal of the research and for decrement of the problem facing Ethiopian women's like you. We would greatly appreciate your help in responding to this survey. The survey will take about 20 minutes to ask the questions. Would you be willing to participate?"

If yes, proceed.

If no, thank and stop here.

Questioner

	Part I General			
S/No	Question	Response	Code	skip
101	Date of data collection	dd/mm/yy		
102	Code of coordinators			
103	Name of the woreda			
104	Code of the woreda			
105	Total teachers in the woreda			

Part II:-A. Socio-demographic characteristics

201	Age	Response	Code	skip
202	Marital status	Single	1	
		married	2	
		Divorced	3	
		widowed	4	
203	Do you have history of breast disease	Yes	1	
		No	0	
204	Educational level	Certificate	1	
		Diploma	2	
		Degree	3	
		Master	4	
205	Do you have a family history of breast cancer	Yes	1	
		No	0	
206	Religion	Orthodox	1	
		Muslim	2	
		protestant	3	
		Catholic	4	
		Other	5	
207	Ethnicity	Kafa	1	
		Amhara	2	
		Oromo	3	
		Other	4	
208	Monthly income in ETB	_____birr		

Part III: Practice of BSE

301	Do you perform breast self examination?	Yes	1	
		No	0	
302	If yes, how often do you perform it?	Once a week	1	
		once a month	2	
		once three month	3	
		once a year	4	
		if other	5	
303	Have you ever had a mammogram?	Yes	1	
		No	0	
304	Have you ever had breast examination by physician?	Yes	1	
		No	0	

Part III: Respondents source of information

401	Source of Information about breast cancer	Radio/TV	1	
		News paper	2	
		Health professional	3	
		Friends	4	
		I never heard	5	

Part V: cues to action				
501	Have you ever seen/heard about women who perform BSE last one month	Yes	1	
		No	0	
502	Have you ever seen/heard a women having BC last one month	Yes	1	
		No	0	
503	Have you ever hared through media or read about BSE during the last one month	Yes	1	
		No	0	
Part VI: Knowledge				
601	Have you heard about breast cancer?	Yes	1	
		No	0	
602	Do you know the exact age breast self examination should start?	Yes	1	
		No	0	
603	Do you know when you have report or contact with health professional after BSE?	Yes	1	
		No	0	
604	Do you know symptoms of breast Ca?	Yes	1	
		No	0	
605	Do you know factors contributing for breast ca?	Yes	1	
		No	0	
606	Have you ever had a mammogram?	Yes	1	
		No	0	
607		Yes	1	
		No	0	
Part VII:-Perceived Susceptibility				
701	It is likely that I will get breast cancer	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
702	My physical health makes it more likely that I will get breast cancer.	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
703	I feel I will get breast cancer sometime during my life	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	

Part VIII:-Perceived Severity				
801	The thought of breast cancer scares me	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
802	When I think about breast cancer, my heart beats faster	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
803	I am afraid to think about breast cancer	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
804	Problems I would experience with breast cancer would last a long time	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
805	Breast cancer would threaten a relationship with my husband	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
806	If I got breast cancer, it would be more serious than other diseases.	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	

VIIII:-Benefit BSE

901	When I do BSE, I am doing something to take care of myself	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
902	Completing BSE each month may help me find breast lumps early	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
903	Regular BSE decreases the rate of death from breast cancer	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
904	If I find a lump early through BSE, my treatment for breast cancer may not be as bad	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
Part X:-Barrier BSE				
1001	BSE is embarrassing to me	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1002	BSE takes too much time	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1003	It is hard to remember to do breast examination	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	

1004	I don't have enough privacy to do breast examination	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1005	BSE is not necessary if you have a breast exam by a healthcare provider	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1006	BSE is not necessary if you have a routine mammogram	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1007	I am afraid I would not be able to do breast self-exams.	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1008	I have other problems more important than doing BSE	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
	Part XI:-BSE self-efficacy			
1101	I know how to perform BSE	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1102	I can perform BSE correctly	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1103	I could find a breast lump by performing BSE	Strongly disagree	1	
		Disagree	2	
		Neutral	3	

		Agree	4	
		Strongly agree	5	
1104	I feel confident that if I perform a breast self-exam,	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1105	I am able to find a breast lump that is the size of a hazelnut	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1106	I could feel any abnormalities in my breast.	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1107	I am sure of the steps to follow for doing BSE	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1108	I am able to tell something is wrong with my breast when doing BSE	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1109	I am able to tell something is wrong with my breast when I look in the mirror	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	
1110	I can use the correct part of my fingers when examining my breasts	Strongly disagree	1	
		Disagree	2	
		Neutral	3	
		Agree	4	
		Strongly agree	5	

በጂማ ዩኒቨርስቲ የህብረተሰብ ጤናና ሕክምና ሳይንስ ኮሌጂ

የጤና አጠባበቅና የሥነ - ባህሪያት ትምህርት ክፍል

የጥናት መረጃ መስጫ

መግቢያ

ጤና ይስጥልኝ ስሜ---------- ይባላል፡፡ የምሰራው በጅማ ዩኒቨርስቲ የህብረተሰብ ጤናና ሕክምና ሳይንስ ኮሌጅ ነው፡፡ በአሁኑ ወቅት የድኅረ ምረቃ ትምህርቴን በመከታተል ላይ ስሆን ይህም ጥናት ለትምህርቴ ማሟያ ይሆን ዘንድ የተዘጋጀ ነው፡፡

የጥናቱ ዓላማ ሴት መምህራን ራሳቸውን በራሳቸው ጡታቸውን ለካንሰር ምርመራ የማካሄድ ባህሪያቸውን ማጥናት ነው፡፡

የጥናቱ ቦታ ካፋ ዞን

በዚህ ጥናት ላይ የሚያደርጉት ተሳትፎ ሙሉ በሙሉ በፍቃደኝነት ላይ የተመሰረተ ነው፡፡ ከዚህ ጥናት የምናገኘዉ መረጃ ለምርምር እና ለጥናት ከመሆንም አልፎ በሀገራችን የካንሰር በሽታን ለመከላከል የሚያስችል የመነሻ ሀሳብን ለማመንጨት ጠቀሜታ ይኖረዋል በችግሩ ዙሪያ ለሚሰሩ መንግስታዊ እና መንግሰታዊ ላልሆኑ ድርጅቶችም እንደ አንድ ግብዓት ከማገልገሉ ባሻገር በእርስዎ ላይ ምንም አይነት ተፅዕኖ የለውም ሚስጥርን ከመጠበቅም አንፃር በቃለ መጠየቁ ላይ ስም አይፃፍም መጠይቁ የሚካሄደዉም በግል ሲሆን ከ15-20 ደቂቃዎችን ይፈጃል መመለስ ያልፈለጉትን ጥያቄ እንዲመልሱ አይገደዱም በሂደቱ ላይ በጥናቱ ላለመካፈል በማንኛውም ወቅት ለመወሰን ይችላሉ ነገር ግን ሁሉንም ጥያቄዎች እንዲመልሱልን እናበረታታለን ጥያቄዎቹ በአስር ዋና ዋና ክፍሎች የተከፈሉና በምርጫ መልክ የተዘጋጁ ሲሆን ከተዘረዘሩት አማራጮች ውስጥ ትክክለኛ ነዉ የሚሉትን አንዱን ብቻ በመምረጥ ይክበቡ ግልፅ ያልሆነ ነገር ካለ በማንኛውም ጊዜ ሊጠይቁን ይችላሉ፡፡

ስለትብብርዎ በጣም አመሰግናለሁ ከዚህ ቀጥሎ በጥናቱ ለመሳተፍ መስማማትዎን ለማረጋገጥ የሚከተለውን የስምምነት ቅጽ ያንብቡ፡፡

የስምምነት ቅጽ

ተመራማሪው የጥናቱን ዓላማ በሚገባ አስረድተውኛል፡፡ በተጨማሪም በጥናቱ ያለመሳተፍና በማንኛውም ጊዜ ለማቋረጥ ያለኝን መብት ገልጽውልኛል፡፡

በዚህም መሠረት በጥናቱ ለመሳተፍ

☐ ተስማምቻለሁ

☐ አልተስማማሁም

ከተስማሙ ወደ መጀመሪያው የጥያቄ ክፍል ይለፉ

ጥያቄ

ክፍል 1 :- አጠቃላይ				
ተ/ቁ	ጥያቄ	መልስ	ኮድ	አስተያየት
101	መረጃ የተሰበሰበበተ ቀን	ቀን/ወር/ዓም		
102	የመረጃ ሰብሳቢው መለያ ቁጥር			
103	ወረዳ			
104	የወረዳ መለያ ቁጥር			
105	በወረዳው ውስጥ የሚገኙ የሴት መምህራን ቁጥር			
ክፍል 2 :- መሠረታዊ መረጃ				
201	ዕድሜ	_____		
202	የጋብቻ ሁኔታ	ያላገባች	1	
		ያገባች	2	
		የተፋታች	3	
		ባሏ የሞተባት	4	
203	ከዚህ በፊት በጡት በሽታ ታመሽ ነበር	አዎ	1	
		አልታመምኩም	2	
204	የትምህርት ደረጃ	ቲ.ቲ. አይ	1	
		ዲፕሎማ	2	
		ዲግሪ	3	
		ማስተርስ	4	
205	በዘር ግንድዋ ውስጥ የጡት ካንሰር በሽታ	አለ	1	
		የለም	2	
206	ሀይማኖት	ኦርቶዶክስ	1	
		ሙስሊም	2	
		ካቶሊክ		
		ፕሮቴስታንት		
207	ብሄረሰብ	ካፋ	1	
		አማራ	2	
		ኦሮሞ	3	
		ሌሎች	4	
208	የወር ገቢ	_____		

ክፍል 3፡- ራስሽን በራስሽ የጡት ምርመራ የማድረግ ልምድን በተመለከተ

301	እራስሽ በራስሽ የጡት ምርመራ ታደርጊያለሽ	አዎ	1	
		አላደርግም	2	
302	ለተራቁጥር 301 ጥያቄ ምልስሽ አዎ ከሆነ በምን ያህል ጊዜ	በሳምነት አንዴ	1	
		በወር አንዴ	2	
		በሶስት ወር አንዴ	3	
		ካማራጩ ውጪ ከሆነ ይግለጹ	4	

ክፍል 4፡- ስለ ካንሰርና የስጡት ምርመራ ለመጀመሪያ ጊዜ ተሰሙት

401	ስለካንሰር በሽታና ራስን በራስ የጡት ምርመራ ስለማድረግ መረጃ ያገኘሽው ከየት ነው	ከሬዲዮ/ከቴሌቪዥን	1	
		ከጋዜጣ	2	
		ከጤና ባለሙያ	3	
		ከጓደኞቼ	4	
		ከማንም አልሰማሁም	5	
ክፍል 5፡- የጡት ምርመራ ለማድረግ ተነሳሽነት				
501	ባለፈው አንደ ወር ውሰጥ ራሷን በራሷ ጡቷን የምትመረምር ሴት ኢጋጥማሻለች ወይም ስለሷ ስምተሻል	አዋ	1	
		አልሰማሁም	0	
502	ባለፈው አንደ ወር ውሰጥ በጡት ካንሰረ የተያዘች ሴት አይተሻል ወይንም መያዛን ሰምተሻል	አዋ	1	
		አልሰማሁም	0	
503	ባለፈው አንደ ወር ውሰጥ ከዜና ማሰራጫ/ከመጽሐፍ/ ከጋዜጣ ወዘተ ስለጡት ካንሰር ወንም ራስን በራስ የጡት ምርመራ ስለማድረግ ሰምተሻል /አንብበሻል	አዋ	1	
		አልሰማሁም	0	

ክፍል 6፡- ስለጡት ካንሰርና ራስን በራስ የጡት ምርመራ ያለዎትን ዕውቀት በተመለከተ

601	የጡት ካንሰር በሽታን በተመለከተ ሰምተሽ ታውቂያለሽ	አዎ	1	
		አልሰማሁም	0	
602	ራስን በራስ ጡትን መመርመር አስመልክቶ ኢንፎርሜሽን አለሽ	አዎ	1	
		አልሰማሁም	0	
603	ራስን በራስ ጡትን መመርመር ይጠቅማል ብለሽ ታስቢያለሽ	አዎ	1	
		አይጠቅምም	0	
604	ራስን በራስ ጡትን መመርመር የሚጀመርበት ዕድሜን ታውቂያለሽ	አዎ	1	
		አላውቅም	0	
605	ራስሽን ከመረመርሽ በኋላ መቼ ከሐኪምሽ ጋር መገናኘት እንዳለብሽ ታውቂያለሽ	አዎ	1	
		አላውቅም	0	
606	የጡት ካንሰር መንስኤዎችን ታውቂያለሽ	አዎ	1	
		አላውቅም	0	
607	የጡት ካንሰር ምልክቶችን ታውቂያለሽ	አዎ	1	

		አላውቅም	0	
608	ከዚህ ቀደም በኤክስሬ የጡት ምርመራ አድርገሻል	አዎ	1	
		አላውቅም	0	
609	ከዚህ ቀደም በሐኪም የጡት ምርመራ አድርገሻል	አዎ	1	
		አላውቅም	0	

ክፍል 7፦ ለጡት ካንሰር ያለዎት ተጋላጭነት

701	ለጡት ካንሰር ተጋላጭነቴ በእጅጉ ዝቅተኛ ነው	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
702	አሁን ያለኝ የጤና ሁኔታ ይበልጥ ለጡት ካንሰር ሊያጋልጠኝ ይችላል ብዬ እገምታለሁ	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
703	እደሚሰማኝ ከሆነ ለወደፊቱ በሕይወቴ አጋጣሚ በአንድ ወቅት የጡት ካንሰር ሊይዘኝ ይችል ይሆናል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	

ክፍል 8 ፦ የካንሰር በሽታ አደገኛነት/ገዳይ

801	ስለ ጡት ካንሰር የሚወራው እኔን በእጅጉ አስፈርቶኛል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
802	ስለ ጡት ካንሰር ሳስብ የልብ ትርታዬ ይጨምራል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
803	ስለ ጡት ካንሰር ሳስብ በእጂጉ ፍርሀት ይሰማኛል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	

804	ከረዥም ጊዜ በፊት የጡት ካንሰር በሽታ አጋጥሞኝ ነበር	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
805	የጡት ካንሰር የእኔና የባሌን የወደፊት ግንኙነት የሚያበላሸው ይመስለኛል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
806	የጡት ካንሰር ቢይዘኝ ከሌሎች በሽታዎች ይልቅ በጣም አደገኛ ሊሆን እደሚችል እገምታለሁ	በፍጹም አልስማማም	1	
		አለስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	

ክፍል 9፦ እራስን በራስ ጡትን መመርመር ጠቀሜታው

901	ጡቴን በራሴ እጅ ምርመራ በማደርግበት ጊዜ ለራሴ ጤንነት ጥንቃቄ እንዳደረግሁ ሆኖ ይሰማኛል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
902	በየወሩ የራሴን ጡት ምርመራ የማድረጌ ፋይዳ የካንሰር ምልክት የሆነውን እብጠት ወዲያውኑ እዳገኝ ይረዳኛል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
903	ተከታታይነት ያለው ራስን በራሰ የጡት ምርመራ ማድረግ በጡት ካንሰር ሳቢያ ሊመጣ የሚችለውን ሞት ይቀንሳል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
904	የራሴን ጡት በራሴ ምርመራ ሳደረግ ምናልባት የካንሰር ምልክት የሆነውን እብጠት ወዲያውኑ ባገኝ የጡት ካንሰር ሕክምናዬ የተሻለ ሊሆን ይችላል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	

ክፍል 10 :-ጡትን ራስን በራስ መመርመር የሚያግዱ

1001	እኔ ራሴን በራሴ ጡቴን ስመረምር ምቾት አይሰማኝም	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
1002	ጡቴን በራሴ በራሴ እጅ ምርመራ ሳካሄድ ረ™ም ሰዓት ይፈጅብኛል	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
1003	የጡት ምርመራዬን የማካሂድበትን ጊዜ ማስታወስ ለኔ እጅግ በጣም ከባድ ነው	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
1004	የጡት ምርመራዬን ለማካሄደ የሚያስችል በቂ ነፃነት የለኝም	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
1005	በሐኪም የጡት ምርመራ የምታኪሂጂ ከሆነ የራስን ጡት በራስ መመርመር ብዙም አስፈላጊ አይደለም	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
1006	በጡት መመርመሪያ ማሽን በየወቅቱ ምርመራ የምታደርጊ ከሆነ ራስን በራስ ጡትን መመርመር አስፈላጊ አይደለም	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
1007	እፍረት ስለሚሰማኝ ራሴን በራሴ የጡት ምርመራ ማካሄድ አልችልም	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
1008	ራስን በራስ የጡት ምርመራ ከማካሄድ ይልቅ ይበልጥ ሌላ አንገብጋቢ ችግር አለብኝ	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	

ክፍል ii :- ራስን በራስ ጡት መመርመረ ማኬሄድ የሚያችል በራስ መተማመን

ii101	ራሴን በራሴ የጡት ምርመራ ማደረጉን እችልበታለሁ	በፍጹም አልስማማም	ı	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
ii102	ራስን በራስ የጡት ምርመራ ማድረጉን በትክክል እችላለሁ	በፍጹም አልስማማም	ı	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
ii103	ራስን በራስ የጡት ምርመራ በማድረግ የጡት ካንሰር ምልክት የሆነችውን ትንሽ እብጠት ማግኘት እችላለሁ	በፍጹም አልስማማም	ı	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
ii104	የራሴን ጡት በራሴ ምርመራ በማድረጌ በራሴ መተማመን ይሰማኛል	በፍጹም አልስማማም	ı	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
ii105	የአተር ፍሬ የምታህለውን የካንሰር ምልክት እብጠት መለየት እችላለሁ	በፍጹም አልስማማም	ı	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
ii106	ጡቴን በመዳሰስ ከወትሮው ለየት ያሉ ነገሮችን መለየት እችላለሁ	በፍጹም አልስማማም	ı	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
ii107	ራስን በራስ የጡት ምርመራ ማድረግ የሚያስችሉ ቅደም ተከተሎችን በእርግጠኝነት አውቃለሁ	በፍጹም አልስማማም	ı	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
ii108	ራስን በራስ የጡት ምርመራ በማደርግበት ጊዜ የተለየ ነገር ቢገጥመኝ መናገር እችላለሁ	በፍጹም አልስማማም	ı	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	

1109	በመስተዋት ጡቴን ስመለከት የተለየ ነገር በጡቴ ላይ ብመለከት መናገር እችላለሁ	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	
1110	ጡቴን በምመረምርበት ጊዜ የምጠቀምባቸው የጣቶቼ ክፍል ለምርመራዉ ተገቢ የሆኑትን ነው	በፍጹም አልስማማም	1	
		አልስማማም	2	
		ገለልተኛ	3	
		እስማማለሁ	4	
		በጣም እስማማለሁ	5	